STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

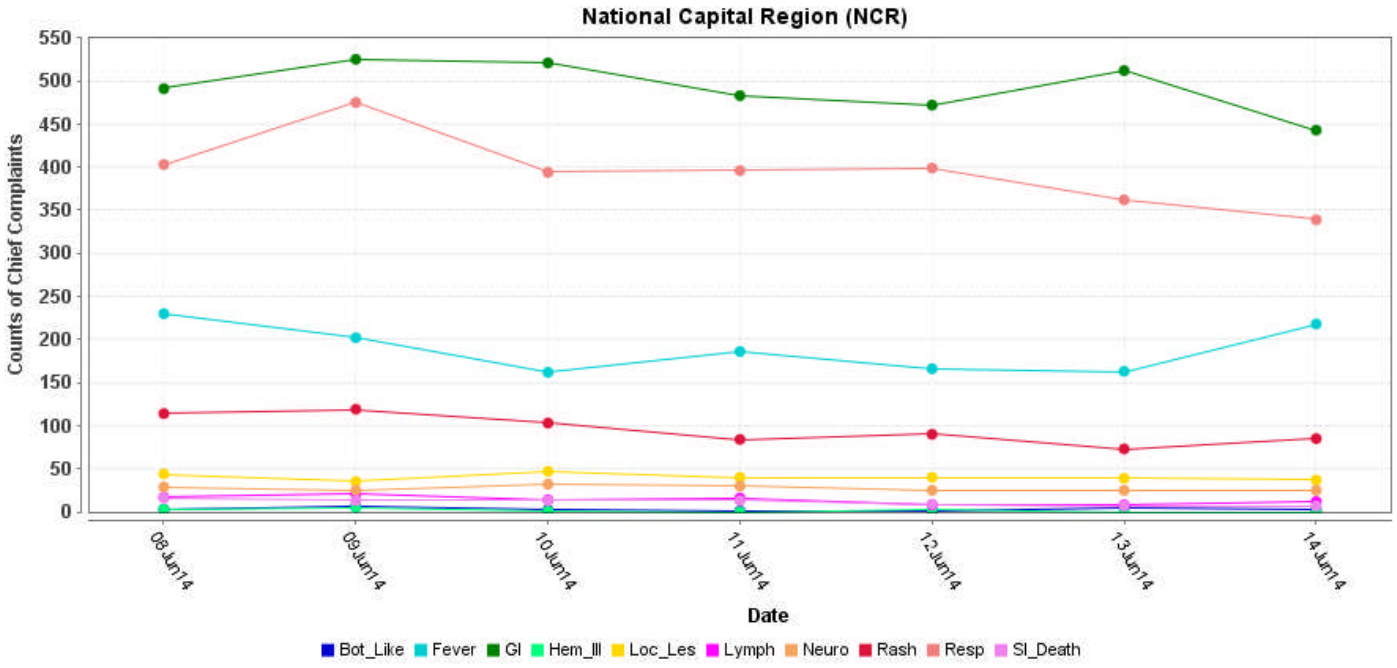
June 20, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:24
Reporting for the week ending 06/14/14 (MMWR Week #24)

CURRENT HOMELAND SECURITY THREAT LEVELS

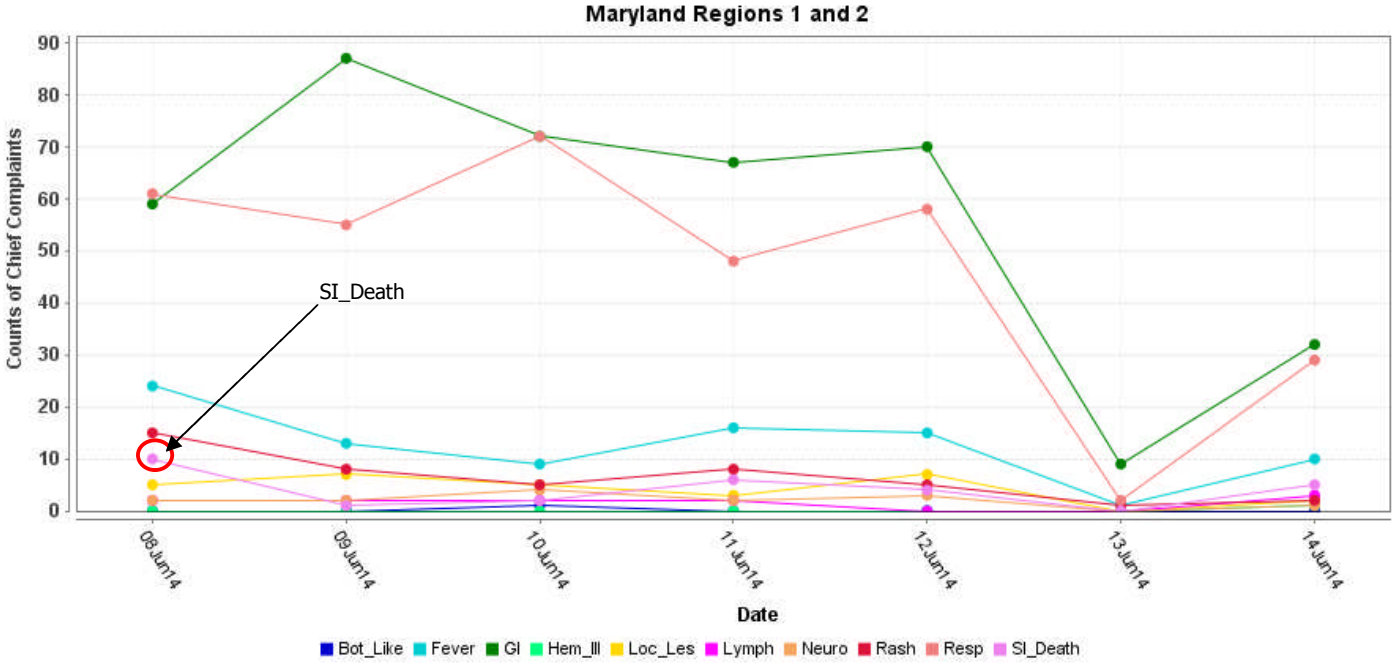
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

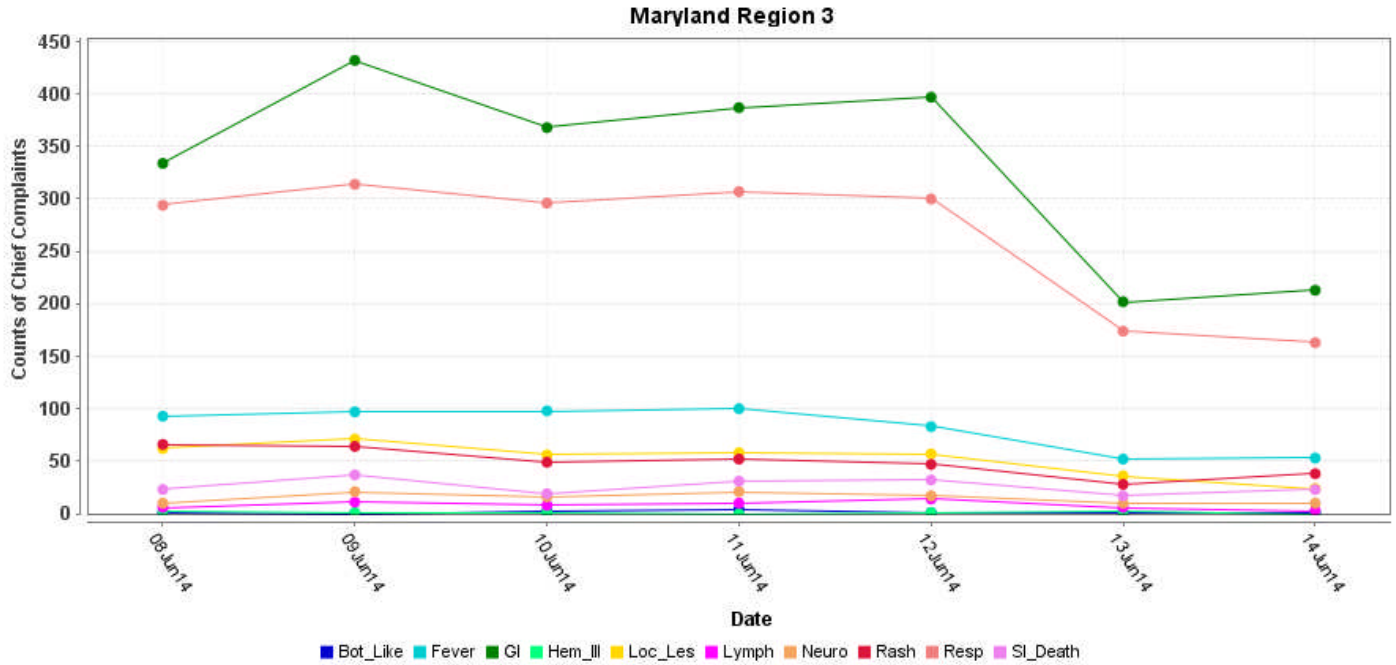


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

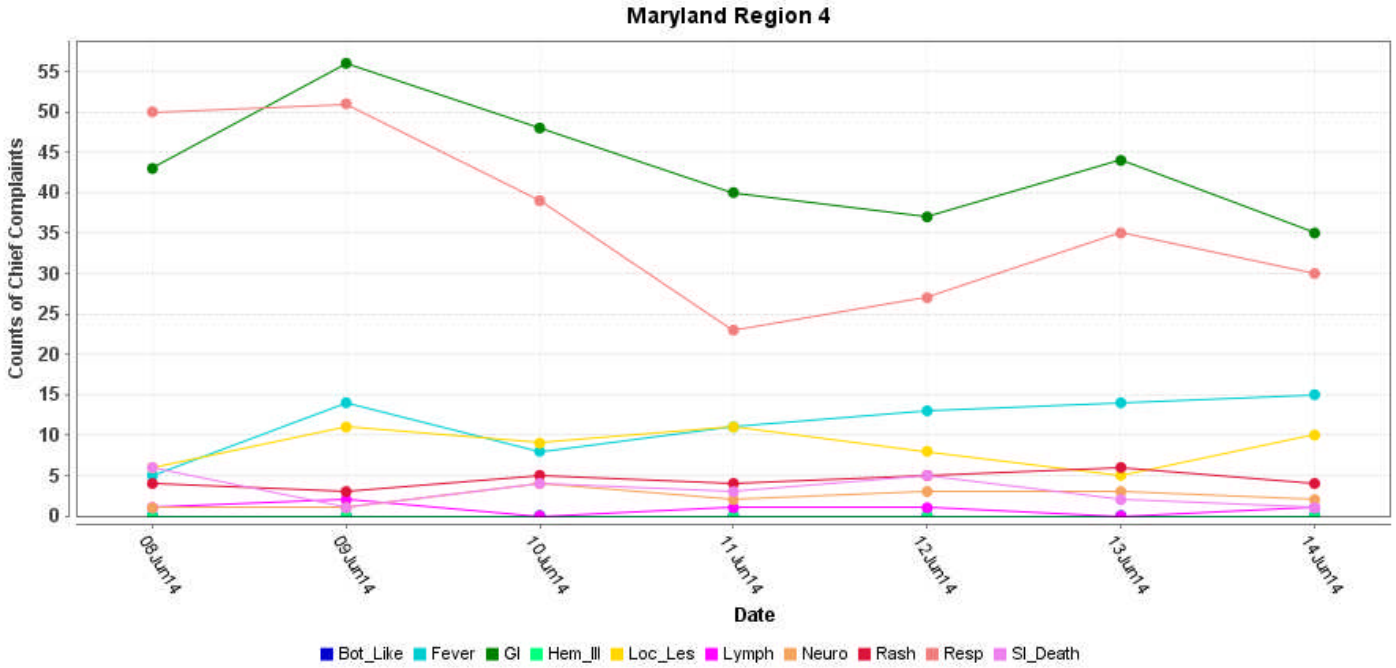
MARYLAND ESSENCE:



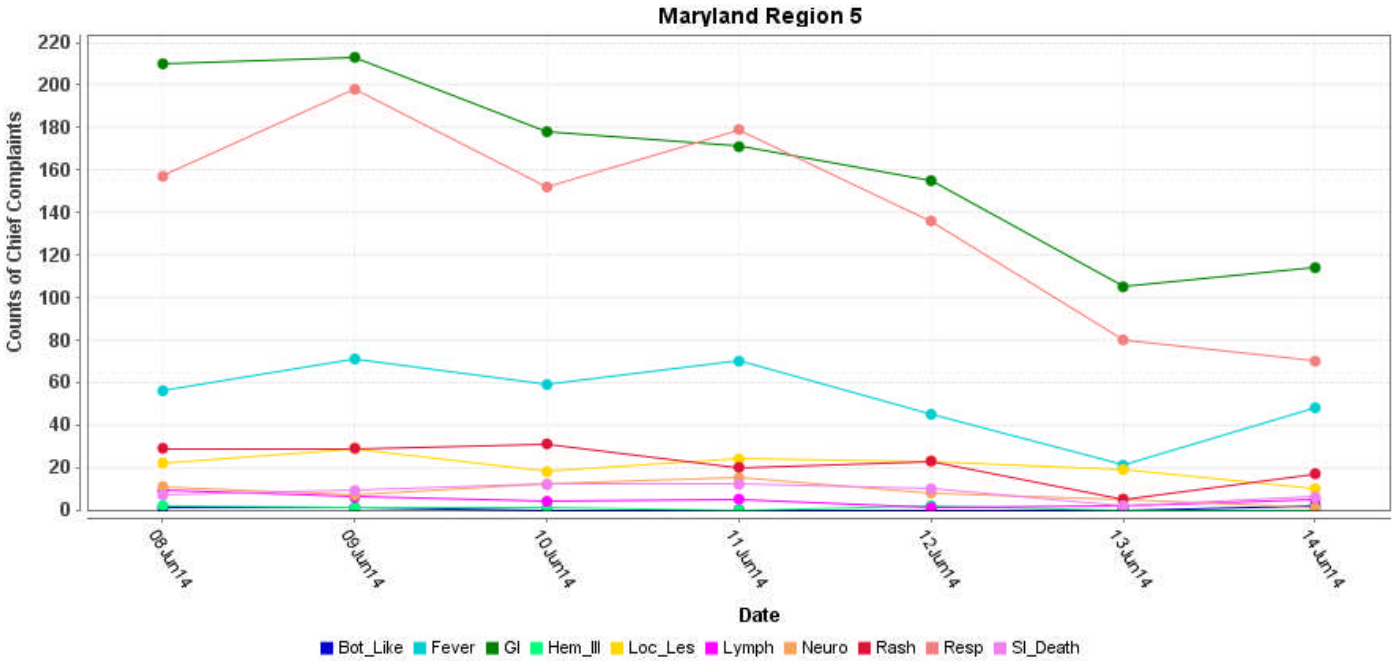
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



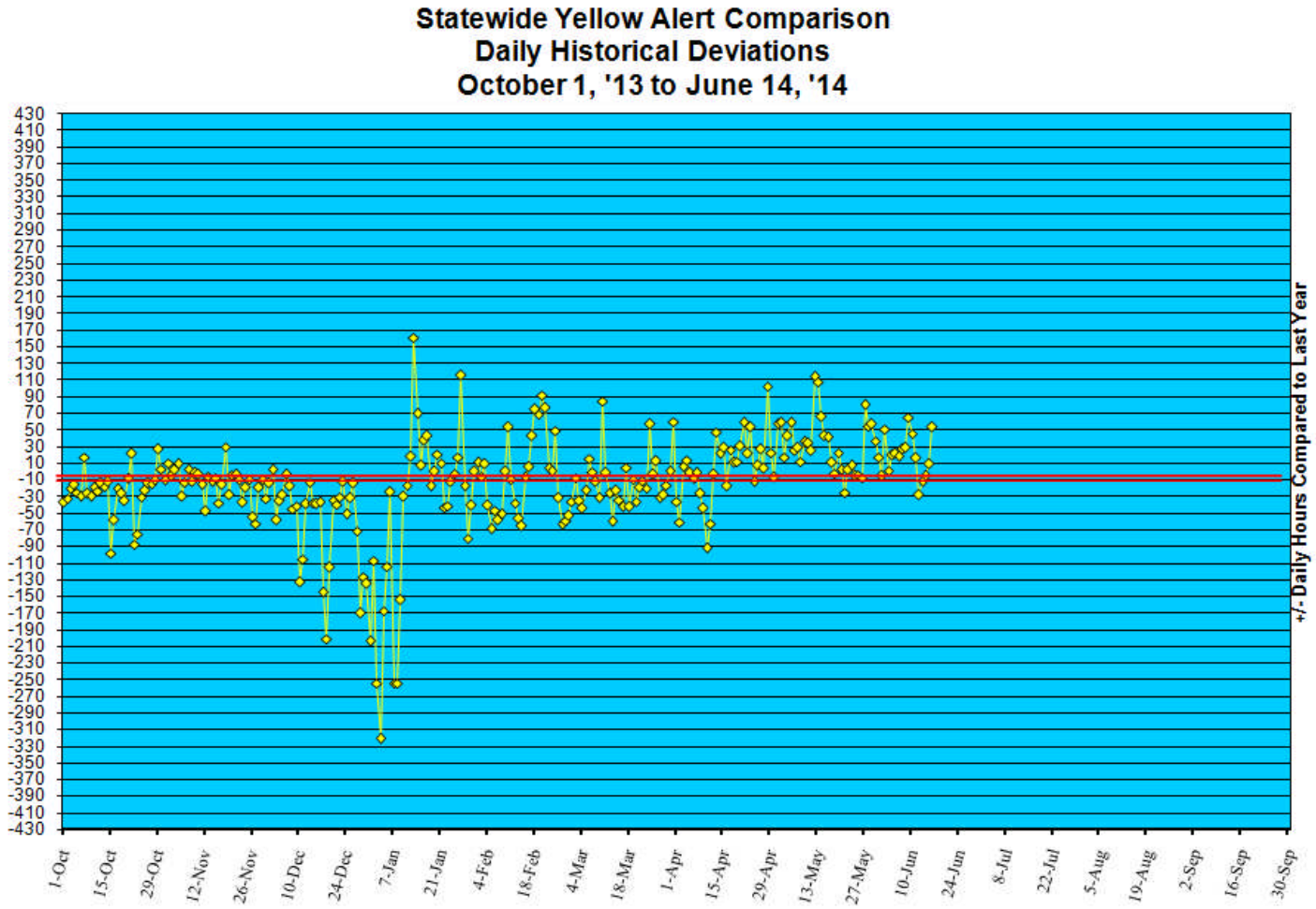
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in May 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (June 8 - June 14, 2014):	4	0
Prior week (June 1 - June 7, 2014):	4	0
Week#24, 2013 (June 9 - June 15, 2013):	12	0

4 outbreaks were reported to DHMH during MMWR Week 24 (June 8 - June 14, 2014)

1 Foodborne Outbreak
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Private Home

1 Gastroenteritis Outbreak
1 outbreak of GASTROENTERITIS associated with a Daycare Center

2 Rash Illness Outbreaks
2 outbreaks of HAND, FOOT, AND MOUTH DISEASE associated with Daycare Centers

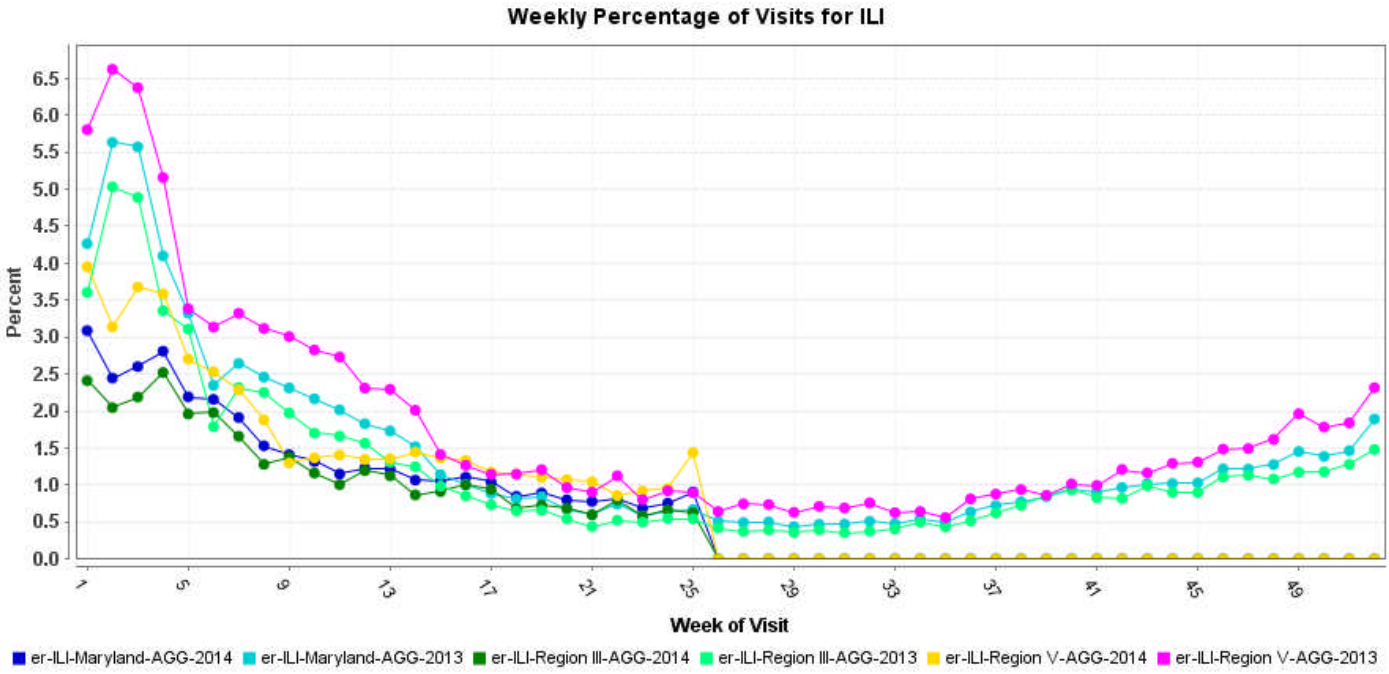
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting generally occurs October through May. The final reporting period for 2014 was MMWR Week 20.

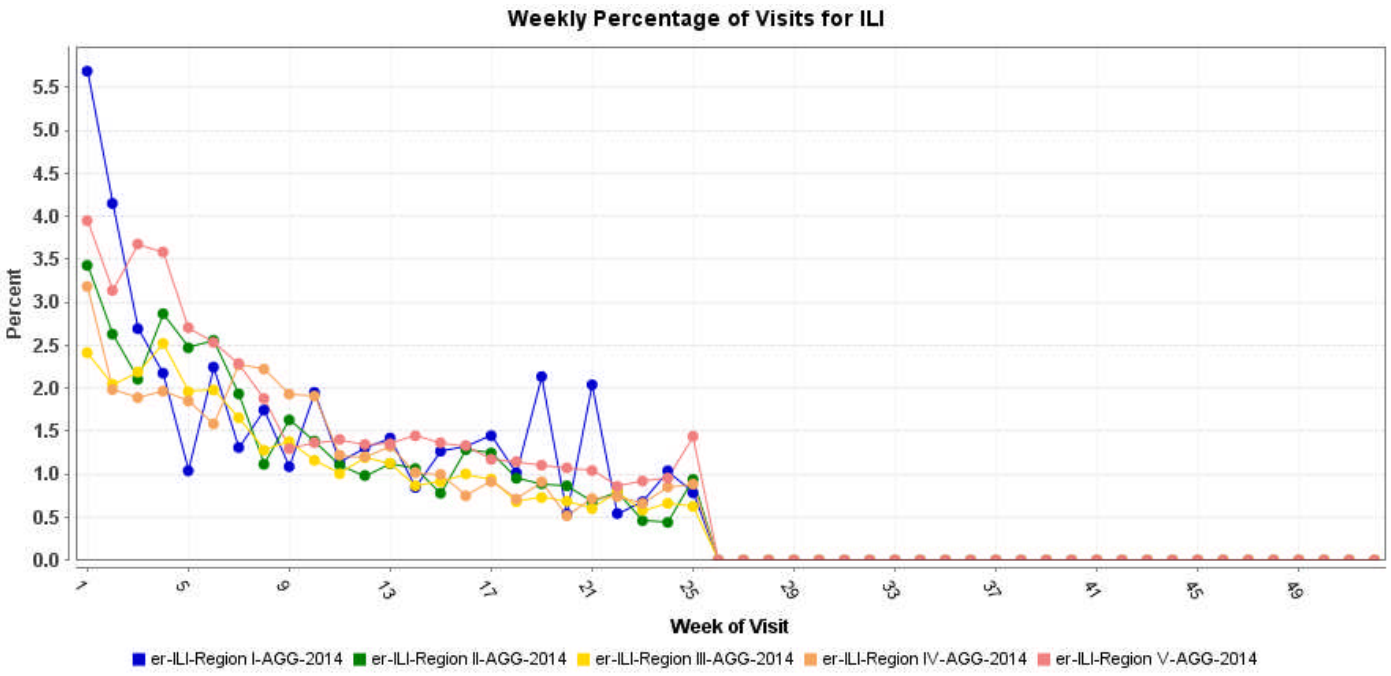
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



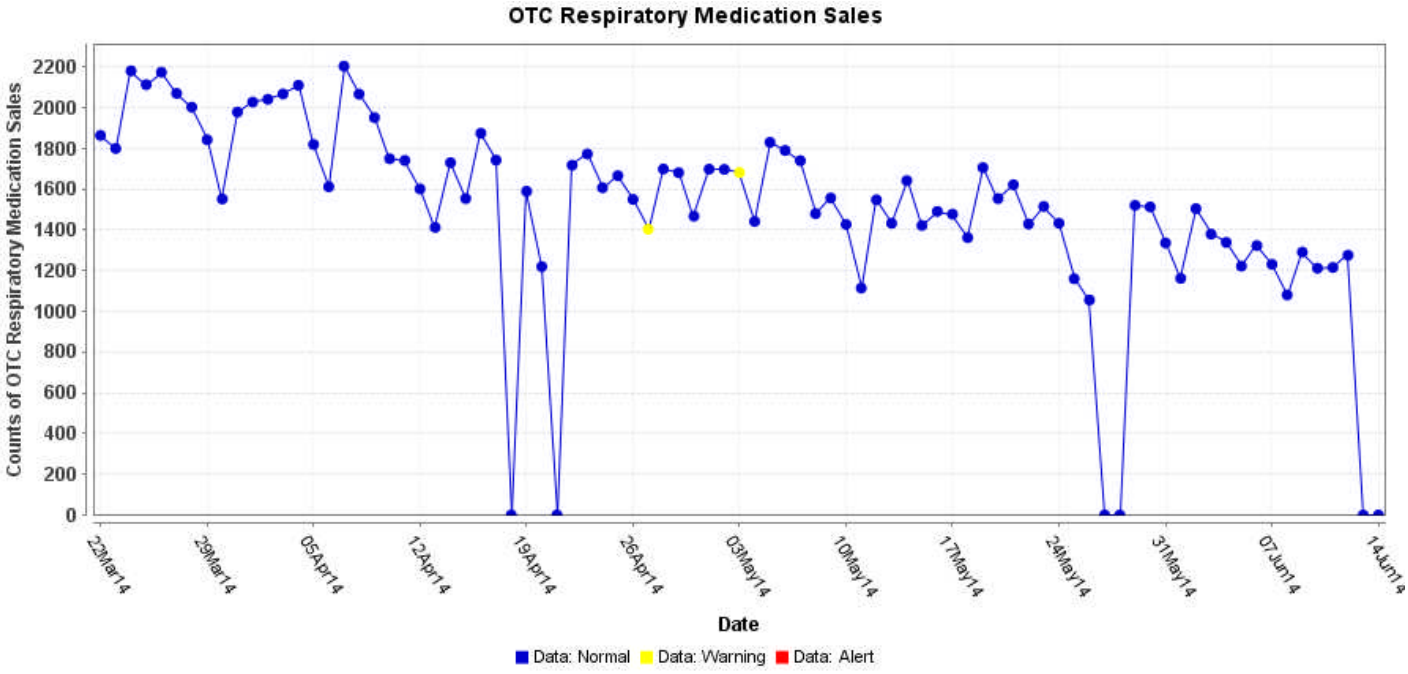
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

E. COLI EHEC (USA): 10 June 2014, As of 9 Jun 2014, a total of 17 persons infected with the outbreak strain of Shiga toxin-producing *Escherichia coli O121* have been reported from 5 states. The number of ill persons identified in each state is as follows: Idaho (3), Michigan (1), Montana (2), Utah (1), and Washington (10). Among persons for whom information is available, dates that illnesses began range from 1 May 2014 to 20 May 2014. Ill persons range in age from 11 years to 45 years, with a median age of 27 years. 66 per cent of ill persons are female. Among those persons with information, 7 (47 per cent) of 15 have been hospitalized. No ill persons have developed HUS, and no deaths have been reported. As part of the ongoing investigation, FDA performed a traceback analysis and determined that Evergreen Sprouts, in the timeframe prior to the outbreak, supplied sprouts to 7 restaurants at which 9 people who became ill during the outbreak reported eating before they became ill. 8 of the people who became ill recalled eating sprouts. This analysis used documents collected directly from the distributors and the grower, Evergreen Fresh Sprouts, as well as documents collected by the states from the points of service. FDA also conducted an inspection of Evergreen Fresh Sprouts' facility on 22-23 May 2014; 27-30 May 2014; and 6 Jun 2014. During the inspection, FDA investigators observed a number of unsanitary conditions, including condensate and irrigation water dripping from rusty valves; a rusty and corroded mung bean room watering system; tennis rackets that had scratches, chips, and frayed plastic used to scoop mung bean sprouts; a pitchfork with corroded metal being used to transfer mung bean sprouts; and a squeegee with visible corroded metal and non-treated wood being used to agitate mung bean sprouts inside a soak vat. (Food Safety Threats are Listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (USA): 11 June 2014, Product testing of a sample of leftover Navitas Naturals Organic Sprouted Chia Powder collected from an ill person's home in Connecticut isolated the outbreak strains of *Salmonella Newport* and *Hartford*, and an additional serotype, *S. Oranienburg*. A search of the PulseNet database identified a total of 2 ill persons infected with the same strain of *S. Oranienburg* in 2 USA states. This strain of *S. Oranienburg* has been seen before in PulseNet, 1 case per month on average. Initial interviews with ill persons suggested a link to the ongoing outbreak investigation, so these illnesses have been combined with the existing *S. Newport* and Hartford infections previously identified. As of 9 Jun 2014, a total of 21 ill persons infected with the outbreak strains of *S. Newport* (13 persons), *S. Hartford* (6 persons), or *S. Oranienburg* (2 persons) have been reported from 12 states. The number of ill persons identified in each state is as follows: Arizona (1), California (3), Colorado (1), Connecticut (3), Florida (1), Massachusetts (1), Michigan (1), New York (4), Ohio (1), Utah (1), Washington (1), and Wisconsin (3). Among persons for whom information is available, dates that illnesses began range from 21 Jan 2014 to 21 May 2014. Ill persons range in age from 1 year to 81 years, with a median age of 49 years. 62 percent of ill persons are female. Among 15 ill persons with available information, 2 (13 per cent) report being hospitalized. No deaths have been reported. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

BRUCELLOSIS (ENGLAND): 11 June 2014, In an update, Public Health England (PHE) has issued new numbers and information of the _Bacillus cereus_ outbreak affecting neonatal intensive care units in the country. After a "look back" at clinical records, health officials find that additional babies received the potentially affected batches of intravenous liquid before Tue 3 Jun 2014, when the affected stock expired, bringing the total number of cases to 21, with 1 death. The hospitals reporting confirmed, probable, and possible cases include 1 probable case at the Stoke Mandeville Hospital, Buckinghamshire -- baby with clinical symptoms, awaiting confirmation on further testing; 1 possible case at Chelsea and Westminster NHS Trust -- baby with clinical symptoms, blood testing did not confirm the infection; 1 possible case at CUH (Cambridge University Hospitals) Addenbrookes -- baby with clinical symptoms, blood testing did not confirm the infection. Chelsea and Westminster NHS Trust (4 confirmed, 1 possible), Guy's and St Thomas' NHS Foundation Trust (3 confirmed), The Whittington Hospital (1 confirmed), Brighton and Sussex University Hospitals NHS Trust (3 confirmed), CUH Addenbrookes (2 confirmed, 1 possible), Luton and Dunstable University Hospital (2 confirmed), Peterborough City Hospital (1 confirmed), Southend University Hospital (1 probable), Stoke Mandeville Hospital (1 probable), and Basildon University Hospital (1 possible). (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

EBOLA VIRUS DISEASE (SIERRA LEONE): 12 June 2014, Government has confirmed that the driver from Mambolo in Kambia [district, Northern province, Sierra Leone], who tested positive for Ebola virus disease (EVD), has yesterday [11 Jun 2014] been discharged from the Kenema Government Hospital after treatment which saw his viral load reduced to negative tests for many days. Also, it now appears that his wife had never tested positive for Ebola but had merely accompanied her husband to Kenema when his tests initially showed positive.

Health Ministry spokesman Sidie Yahya Tunis confirmed to this paper that the driver has survived. Also, apparently, it was an error on the part of the

ministry to have stated in 10 Jun 2014 update that 2 out of the 16 dead Ebola patients were from Kambia. Tunis said no deaths had occurred so far in Kambia. Tunis urged that early reporting of suspected EVD cases increases chances of survival. According to him, they are now putting robust action in place to contain the disease. He said the United Nations Population Fund (UNFPA) has provided support for them to recruit community volunteers who will be trained to tour various communities and search for contacts. Meanwhile, reports monitored from Daru in Jawei chiefdom of Kailahun district [Eastern province] are that the husband of the late Nurse MK, has suddenly appeared in the town from apparent hiding. He is reported to be alive but very weak and emaciated from almost 2 weeks in hiding. He confessed that he went into hiding when he was informed that his wife had died from suspected Ebola and he realized that all the medical persons who treated his wife, plus all the women who washed her corpse, had died. The Imam who prayed over her corpse has also died. Mr SK is alleged to have feared he also had EVD and hid to avoid being taken to Kenema hospital. When he was not seen for 2 weeks, it was assumed he had also died and he got recorded as dead. Reports are that on his arrival in Daru yesterday [11 Jun 2014], he received medical care and blood samples have been taken from him for testing. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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Web Site: www.dhmh.maryland.gov